

REMARKS

In the Office action, claims 10, 11, 13, 14, 16, 18, 19, 21, 23, 24, 26, 28, 30, 31 and 34 were rejected as anticipated by Kowal; claims 1-8, 12, 17, 22, 25, 32 and 35 were rejected as being unpatentable over Kowal in view of two Kreidel references; claim 33 was rejected as being unpatentable over Kowal in view of Trickle; claims 15, 20 and 29 were rejected as being unpatentable over Kowal in view of Schwarz; and claim 9 was rejected as being unpatentable over Kowal in view of Kreidel and Schwarz.

As to preliminary matters, the Examiner's comments as to the present claims being directed to a single ferrule tube fitting based on the presently claimed structure is duly noted and appreciated. The Examiner's remarks with respect to Applicants' earlier presented discussion concerning Kowal are also noted. Applicants' attorney wishes to point out that the remarks presented in the earlier response were intended to be in the context of the present specification and its use of the terminology toggle-like hinging action and the resultant effect such as illustrated in an exemplary manner in Fig. 28 among others. Applicants' attorney apologizes for any confusion caused by those remarks to the extent that they may have appeared to argue that Kowal does not have radial compression at the forward portion, as that was not the intended interpretation of the presented argument. Applicants' design in effect has two actions, the first being a penetrating action caused by radial compression of the forward edge, and a swaging or collet action with a convex portion of the cylindrical interior wall caused by the toggle-like hinging action. The presently amended claims are directed to more clearly pointing out this significant distinction over the art of record.

The independent claims that remain after this amendment, notably claims 1, 10, 30 and 35 have been amended to recite that the ferrule has a portion of the cylindrical interior wall that is convex upon pull-up to swage the ferrule onto the tube end and axially adjacent the indented front edge. The claims thus recite two distinct actions, the first being a radial compression to cause the front edge to indent or penetrate the tube wall, and a toggle-like hinging action that produces a convex portion adjacent the indent or penetrated front edge. The art of record, and to the Applicants' knowledge no one prior, has produced a ferrule that deforms during pull-up so as

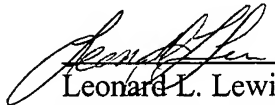
to both bite the tube and also produce the toggle-like hinging action to grip the tube end with a convex portion adjacent the bite. Kowal and the other references of record merely show the old concept of bending or bowing concavely the front edge inward to bite or penetrate the tube wall. There is no additional deformation as recited in the presently amended claims, such as the toggle-like hinging action and the back end radially spaced from the tube wall after pull-up to produce a convex portion adjacent the bite to grip the tube end. This is particularly so for the present independent and dependent claims that further recite a ferrule that is case hardened about its entire surface.

Applicants traverse the rejections of the dependent claims including as to the combination of references, and also traverse that the Trickle reference is prior art, however, further comment will be deferred pending further examination of the amended independent claims.

The present application is deemed to be in proper condition for allowance and favorable action is requested.

Respectfully submitted,

Dated: June 13, 2005



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